



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JUL 10 2012

Janis Denman  
Cadillac District Supervisor  
Michigan Department of Environmental Quality  
Cadillac District Office  
120 West Chapin Street  
Cadillac, Michigan 49601-2158

Dear Ms. Denman:

The U.S. Environmental Protection Agency has reviewed the draft Renewable Operating Permit (ROP), permit number MI-ROP-B1477-20XX, for Lafarge Midwest, Inc. – Alpena Plant located in Alpena, Michigan. To ensure that the source meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

- 1.) Several emission units in FG RAW MAT, beginning on page 30 of the draft ROP, use a fabric filter dust collector, i.e. a baghouse, to control PM10 emissions. Although these baghouses are mentioned and are normally assumed to be operating in the malfunction abatement plan (MAP) and operations and maintenance plan, the permit does not specifically require the facility to operate these baghouses. Condition IV.1 of PTI 166-93A states that the emission units in FG RAW MAT shall not be operated unless the associated baghouses are installed, maintained, and operated. Please ensure that there is a condition in the permit that requires the facility to operate the baghouses for the emission units in FG RAW MAT to ensure that the terms from PTI 166-93A are incorporated completely.
- 2.) The PM10 limit established in FG RAW MAT condition I.3, located on page 31 of the draft ROP, applies to the following emission units with associated identification numbers: fly ash rail car unloading 17-018, fly ash receiver bin 17-040, fly ash dome 17-100, fly ash day bin 17-200, and fly ash gravity conveyors 17-315 and 17-415. These emission limits are established in EU ARM, condition I, of PTI 166-93A. However, the emission limits are placed on the baghouses associated with the emission units in PTI 166-93A as opposed to on the emission units themselves. Please explain and include in the permit record how the limit established on the baghouses in PTI 166-93A are sufficiently incorporated into the draft permit.

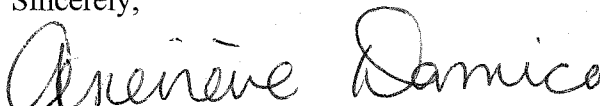
- 3.) PTI 166-93A permitted modification of emission units in FG RAW MAT. PTI 166-93A established PM10 emission rate limits at 0.02 grain per actual cubic foot of exhaust gas for several emission units in FG RAW MAT. However, EU ARM condition V.1 of PTI 166-93A provides that testing may be required to verify the PM10 emission rates from each emission unit. The draft permit, as written, does not explicitly require additional testing to verify the PM10 emission rate from each emission unit. Instead, condition III.1 of FG RAW MAT, on page 31 of the draft ROP, requires the facility to maintain an approved MAP as a monitoring/testing method. Please explain and include in the permit record how maintaining an approved MAP ensures that the facility is meeting the PM10 emission rate limits or add monitoring, testing, and recordkeeping to the draft ROP sufficient to ensure that these rate limits are enforceable.
- 4.) Draft permit conditions I.1, VI.3, and VIII.1-6 of FG RAW MAT, beginning on page 30 of the draft ROP, are denoted as federally enforceable requirements. However, PTI 166-93A conditions EU ARM I.8, VI.3, and VIII.1-6 are denoted as state-only enforceable conditions. Please clarify and include in the permit record justification as to why these conditions are now federally enforceable.
- 5.) Condition I.2 of FG RAW MILL SYS, located on page 34 of the draft ROP, requires the source to limit the PM10 emission rate to 0.66 pounds per hour as required by PTI 15-05. This condition of the draft ROP requires the facility to implement and maintain a MAP to ensure compliance with this emission rate limit. However, it is not clear how the MAP will ensure continuous compliance with the emission rate. Please explain and include in the permit record how implementing and maintaining a MAP will ensure compliance with this emission rate or add sufficient monitoring, testing, recordkeeping, and reporting sufficient to ensure that the facility complies with the PM10 emission rate limit.
- 6.) Condition V.5 of FG RAW MILL SYS, condition V.8 of FG KG5, and condition V.8 of FG KG6, located on page 36, 41, and 51 of the draft ROP respectively, requires the facility to conduct mercury performance tests every 5 years. The requirements to conduct the test are designated as federally enforceable permit conditions. However, a mercury emission rate limit is not established within the permit. A limit is needed in order to determine whether the facility has passed the performance test or whether retesting is required in the case of a failed stack test. Please clarify whether the facility must comply with a mercury limit. If so, please add this limit to the permit along with any other monitoring, testing, recordkeeping, and reporting to ensure compliance with such a limit. Otherwise, please explain and include in the permit record why a performance test for mercury is required and how this performance test is federally enforceable.
- 7.) Condition III.2 of FG CLINK COOL, located on page 63 of the draft ROP, requires the facility to install and operate a PM CEMS. Condition VI.6 of FG CLINK COOL, located on page 64 of the draft ROP, requires the facility to install and operate a COMS to assure compliance with the PM limit. Please clarify in the permit record that the COMS is being used to assure compliance with the PM limits since the facility is not required to operate a PM CEMS until September 9, 2013, per 40 C.F.R. § 63.1351(c). EPA recommends the

draft permit include a condition that the facility use the PM CEMS to show compliance with the PM limit on and after the date it is required to operate a PM CEMS.

- 8.) FG CLINKER SYS condition VI.3 and FG CMNT STR LOAD condition VI.4, located on pages 70 and 81 of the draft permit respectively, requires the facility to calculate and record the annual PM emissions using EPA AP-42 emission factors or other approved emission factors. Please specify which AP-42 emission factors should be used to determine the annual PM emissions. As a start, several emission factors related to the portland cement manufacturing process can be found in chapter 11.6 of AP-42, Fifth Edition, Volume I.
- 9.) The CAM Plan employs COMS and pressure drop readings for compliance assurance with PM limits but does not establish a mathematical correlation between the opacity and pressure drop indicator ranges and the PM limits. Such correlation must be established for the justification to be adequate.

We appreciate the opportunity to provide comments on this draft permit. If you have any questions, please feel free to contact me or, alternatively, please feel free to have your staff contact Kaushal Gupta at (312) 886-6803 or Michael Langman at (312) 886-6867, both of my staff.

Sincerely,



Genevieve Damico  
Chief  
Air Permits Section